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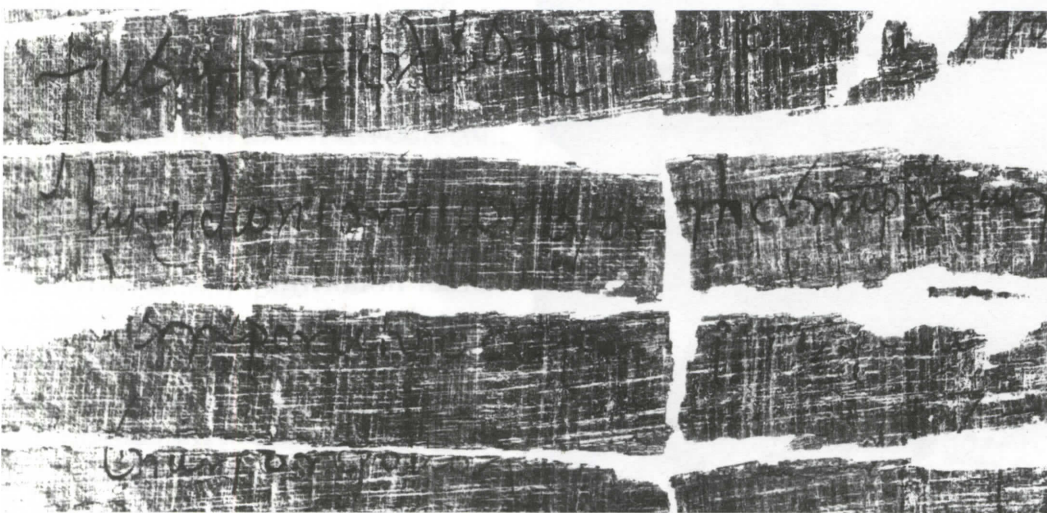
The Petra Papyri in Historical Perspective: The Dating Formulas Robert W. Daniel

About a dozen of the documents of the carbonized papyrus archive found in Petra preserve precise dating formulas. The earliest dated text that has appeared so far is from A.D. 528, and the latest dated text is from A.D. 582. Certainly most of the undated documents will fall within these limits. But since it is unlikely that chance has preserved the very earliest and the very latest texts in the archive, some of the undated texts will have been written somewhat before A.D. 528 and others somewhat after A.D. 582.

We have now a body of documentary texts from Petra that covers the entire reign of the Byzantine Emperor Justinian (A.D. 527-65) and the reigns of his successors, Justin the Second (A.D. 565-78) and Tiberius the Second (A.D. 578-82).

By far the most important of these emperors was the first-mentioned, Justinian the Great, who ruled the Byzantine Empire for almost 35 years in close cooperation with his wife, Theodora. Theodora began life as the daughter of the keeper of bears at the amphitheater in Constantinople, charmed and shocked the capital as a beautiful young actress, then disappeared from the scene to live in solitude in Africa. She later returned to Constantinople with an interest in religious questions, married the Emperor Justinian, and spent the rest of her life as the most influential woman in the empire.

Justinian himself is most famous for his various attempts to reunite the eastern and western parts of the Roman Empire, his parallel attempts to unite the Christian church, his long and expensive wars against foreign invaders in Northern Africa, Spain, Sicily, Italy, and the Balkans, and for his



Detail from the top of Roll 68. Clearly visible at the beginning of the first line are a cross and the Greek word *meta* meaning 'after.' Photo by Henry Cowherd.

wars and diplomacy with the other great threat to the Byzantine Empire, the Persians to the east. Justinian's greatest claim to fame, however, is that he was responsible for the codification of all of Roman law. The collections of laws and edicts known as the Codex of Justinian, the Digest of Justinian, and the Novels of Justinian have influenced legal thought in the Greek east and the European west ever since.

A closer look at one of the dating formulas used in the Petra papyri reflects further aspects of the larger historical background of the time. The dating formula in Roll 68 (*Papyrus Petra Thomas and Francesca Bennett*) is such an example:

After the consulship of Flavius Belisarios, the Most Glorious and All-Praiseworthy, on the tenth day before the Calends of June, in the 432d year (of the Era) of the Province (of Arabia), on the 3d day of the month of Daisios, in the period of the 15th indiction, in Petra, the capital of Third Palestine Salutaris ...

The date turns out to be 23 May 537 in our calendar, but what is of general interest is not the precise date itself, but the *way* the text is dated. It begins with mention of a consulship, or specifically here a postconsulship, because we do not read "in" the consulship, but "after" the consulship of Flavius Belisarios. The office

of consul was conventionally used to date Roman texts after about 500 B.C. Under the Republic, consuls were the highest civil and military magistrates in Rome, but under the empire, the consuls' actual power dwindled to virtually nothing. Nevertheless, the office remained the highest honor that a Roman citizen could attain, and it continued to be used to indicate years until 541, i.e., four years after Roll 68 was written. But because the consulship was exclusively an honorific office, it was not filled every year. The consulship was not even essential for the dating of the document, for as we see, other dating systems were used. When consular dating is used in our texts, it is more because honor is being paid to the consul than that it is truly necessary to fix the document in time.

The consul mentioned in this text, Belisarios, is the most famous person who lived during the reign of Justinian and Theodora, aside from the emperor and his wife themselves, and aside from the court historian of the time, Procopius. Belisarios was a general and an immensely wealthy man, rich enough to maintain a private army of 7000 soldiers. As Justinian's chief general, he marshaled troops from all over the empire against the Persians in the East, and later against the Vandals in North Africa, against the Visigoths in Spain, against the Ostrogoths in Sicily and Italy, and against the Huns in Thrace. The historian Procopius glorified these campaigns.

The Consul Belisarios is next described with two honorifics: "Most Glorious and All-Praiseworthy." Honorifics such as these are typical of the Byzantine period. The two used here are reserved for officials of the very highest rank. But other honorifics were used for all people of high social or professional standing both in civic life and in the church.

After mention of the consul, the day and month are given according to the traditional Roman calendar: the tenth day before the



Robert W. Daniel

Calends (the first day) of June. The Roman calendar was oriented around three fixed days of each month. These days were the Calends (the 1st of a month), the Nones (the 5th or 7th day of a month), and the Ides (the 13th or 15th of a month). Other days were referred to as coming before or after these fixed days, as in the dating formula of Roll 68.

The Roman way of referring to days of the month was clumsy. The population of Petra, like most people in the Greek-speaking east, were much more familiar with the Greco-Macedonian month-names with numbered days from 1 to 30. That way of referring to the day of the month is used a bit further on in the dating formula of Roll 68.

After mention of the Roman month and day, the formula mentions a year of the Era of the Province of Arabia, which came into existence when the Nabataean Kingdom was annexed to the Roman Empire on March 22, A.D. 106. With inclusive counting we can reckon that the 432d year after A.D. 106 was A.D. 537.

The year of the Era of the Province of Arabia truly fixes the document in time. By contrast, the year of a postconsulship is vague for several reasons. First, the document does not state whether this was a first or second postconsular year, and in the case of Belisarios, we know that there were two postconsular years. Second, when a consul was appointed, it might take weeks or even months before news of his appointment reached the provincial towns, and so there were times when one would not know how to date a document by a consul. In the case of the Era of the Province of Arabia, however, we are dealing with a fixed date that everyone in the area knew, and when in doubt, they could consult their local calendars just as we consult ours. Nothing had to be announced from Constantinople.

After dating by the year of the Province of Arabia, the formula gives a month and day, but this time not according to the Roman system, but to the above-mentioned, more practical Greco-Macedonian month and day number: Daisios the 3d. The Greco-Macedonian month names were introduced throughout the Greek-

speaking east soon after the conquest of Alexander the Great at the end of the 4th century B.C. Some 850 years later they are still in use in the Petra papyri.

Finally there is a dating to a 15th indiction. This word comes from the Latin word *indictio*, which means 'announcement' of special taxes. The word then took on the meaning of 'tax year' or 'financial year'. From the time of Diocletian, i.e., from A.D. 297 on, it became a regular feature for dating documents. After about A.D. 350, we find regular cycles of indiction years from year 1 to year 15. After a period of 15 years, the cycle began again from year 1 to year 15. The cycles themselves are not numbered. So that without further indications, reference to, let us say, a fifth indiction is relative. It could be, let us say, the year 560 or 15 years earlier or 15 years later. To my knowledge, no scholar has proposed a convincing explanation of why the indiction cycle was limited to 15 years.

We then read the name of the city Petra, styled as capital of the province, Third Palestine Salutaris. When the Nabataean Kingdom was annexed to the Roman Empire, it was called Arabia. After several reorganizations, the province was renamed Third Palestine Salutaris.

One item is not found in the elaborate dating formula. There is no reference to the year of the Emperor Justinian, but that was about to change. Roll 68 was written on 23 May of A.D. 537. Just a few months later, in August of the same year, the Emperor Justinian passed a law requiring that dating formulas contain a reference to his regnal year. Later dating formulas in the archive contain, of course, a reference to the emperor's regnal year. Roll 67 (*Papyrus Petra Selz Foundation II*), for example, begins:

In the 18th year of the reign of our Master, the Most Divine and Most Pious Flavius Justinianus, Eternal and Imperial Augustus ...

The year is A.D. 544, and this dating formula contains another novelty: it does not mention a year of a consul. This is because Justinian had abolished the office of the consulship in A.D. 541, three years earlier.

Update on the Scrolls

On the occasion of the visit of H.M. Queen Noor to ACOR in 1995, Inventory No. 83 of the scroll archive was named *Papyrus Petra H.M. King Hussein bin Talal and H.M. Queen Noor al-Hussein*. The scroll is among those assigned to the team from Finland. In 1996, work on reconstruction of the text began and it is possible to make some preliminary observations about it.

This scroll is one of the largest and best preserved in the archive. Its total length was probably eight to nine meters, and it contained approximately 600-700 lines of text. The document was written in one column from the beginning to the end of the document, and the scroll was rolled so that the end lay in the middle. In a roll of this length, the separation of the layers (there were some 140 altogether) was very difficult, and from many of the layers, only fragmentary pieces have been recovered. There are obviously still some, although probably not many, unseparated layers. Additionally, there are many loose fragments, some of which will never be placed in their correct position.

The text concerns the settlement of a dispute between two men known from other Petra papyri, Theodoros son of Obodianos and Stephanos son of Leontios. The properties under dispute are not, however, in the town of Petra, but in the neighboring town of Zadakatha (Sadaqa). The agreement is confirmed with oaths exchanged in a Chapel of Kyrikos situated in the same town. Therefore the properties under dispute are probably situated there also.

Theodoros and Stephanos owned houses adjacent to each other, and over several decades there had been disputes between the families. Now the situation has flared up as Stephanos has begun to build a water-channel running from the spring in the courtyard of his neighbor to his own house.

The dispute was not settled in a law court, but by a hearing before two trusted men, and the decision given by those arbitrators. The document reports in detail the process of the case. After some preliminary remarks, the text begins with the date and place of the event. Only the

beginning of the regnal formula of Justinian is visible, without the year. This means the document was written after 537, when use of the regnal year of Justinian began. Traces of the Macedonian date have been identified. The 7th indiction year has been identified, however, and can be interpreted as A.D. 574. Such a date would be appropriate as the titles used of Theodoros (θεοσεβεστατος, θεοφιλεστατος) indicate a late date in his career; in Inv. 67, dated A.D. 544, these titles are not used of him.

The place, Zadakatha, is clear. There is then a record of the proceedings, including long speeches by each party in which they describe in detail the wrongs to which they have been subjected. They refer to many earlier transactions, some of them conducted 53 years before by their respective fathers. The speeches are not without rhetorical flourish:

If everybody could at his will act in this way, many men would be deprived of their lawful rights by the ill-doing of such people who wish—yes, who insist—on taking other people's property into their possession.

There are several subjects under dispute, including rights to draw water from the spring and lead it through the houses, to build water-channels, to use drains, and of access through the houses. Theodoros also accuses Stephanos of trespassing and of stealing building materials from his house, and Stephanos raises the question of an old debt concerning the sale of a vineyard. Finally, the decisions of the arbitrators are given, and the litigants settle their disputes with solemn oaths and their signatures.

Of special interest is the appearance of the name of the Ghassanid leader, Abu Karib ibn Jabala, in this document. In A.D. 528, the Ghassanids became reconciled with the Byzantines, and Abu Karib was named a phylarch, a military leader, of the Arabs in Palaestina Tertia by the Byzantine Emperor Justinian. In our document, his position as a phylarch is mentioned, as he may have acted as a private mediator in the earlier dispute over the sale of a vineyard, an event that is mentioned by our litigants.

Maarit Kaimio, University of Helsinki



Jorma Kaimio, Manna Vesterinen, Tiina Rankinen, Maarit Kaimio, Mari Mikkola, Marjo Lehtinen, Marja Vierros, and Jaakko Frösén, all of the University of Helsinki, with a mock-up of Roll 83.

News from the Fellows

William Mierse

Tired and exhausted after an all night flight from New York and eight hours in the Athens airport my wife, Helen, and I emerged from customs at Queen Alia Airport in Amman to find the smiling face of Sa'id Adawi, sign in hand: "MIERSES/ACOR". It was midnight, October 14, 1996, the start of our first visit to the Middle East and our introduction to ACOR. Sa'id grabbed our bags and whisked us to ACOR, our home for the next four months. I had come to ACOR on a post-doctoral Near and Middle East Research and Training Act (NMERTA) fellowship to work on research in the library and on-site for a study of the continuity and discontinuity in Late Bronze Age and Early Iron Age sanctuary designs. Since my professional work as an art historian has been directed to the western Mediterranean during the Roman period, this new project promised to be interesting from several points.

My express purpose for coming to the Middle East was to work on an archaeological problem. I had no intention of digging any dirt, but wanted to uncover materials in the ACOR library which had been published, often long ago and in obscure places, in order to produce a synthesis which would be of value to scholars working in the study of Late Bronze Age and Early Iron Age architectural history, archaeology, and religion. ACOR has provided me with the facilities. For the first time in several years I have had both the time and the setting in which to pursue leads and think about ideas. I have read vast amounts of material, and I have been able to write. These are all aspects of research and scholarly production which I normally do not have the opportunity to pursue fully because of my responsibilities as a professor and chair at a state university.

The research has gone very well, and I leave ACOR with the better part of a first draft of the manuscript. Certain ideas still need to be developed and certain conclusions will require some reconsideration but much has been accomplished.

The seven centuries that comprise the Late Bronze Age and Early Iron Age (1500-800 B.C.) of the eastern Mediterranean are among the most exciting historically and archaeologically in the region. This was the time that saw the end of the great mercantile states of the Aegean, as well as the world empires of the Hittites and Egyptians, and the emergence of the new kingdoms of Israel, Phoenicia, and Philistia. Yet the new world was built atop the old and it is the degree of change and sameness that interests me: What was held on to and why and what was jettisoned and why? Because architecture is the most social of all the arts (a person cannot build a building alone), and because religious architecture is usually the most conservative, the points of continuity and discontinuity revealed in this study promise to open new approaches to other related issues of this

period. Most of the discussion of the developments over this time period revolve around the questions of pottery forms and decoration. Architecture is usually used only as an auxiliary support for a particular argument. I think that the patterns of the architectural development and use can be equally valuable in helping us to understand the period.

Scattered over the region, there are the remains of over fifty sanctuaries that belong to the period that concerns me. They are the architectural production of the Canaanite people and their descendents, the Phoenicians; the Hittites and their successors the neo-Hittites; the Late Bronze Age peoples of Jordan and those who followed them (the Amonites, Moabites, and Edomites); and the Iron Age peoples of Israel and Philistia. What is shared over the seven hundred years is geographical location, environmental setting, often continuous occupation at the same site, and certain core religious elements inherited from the Canaanite practices. What changes over the centuries is the historical context, the nature of the outside influences, perhaps the ethnic make-up of the region, the economic forces, and the centers of political power. By studying the typology of the sanctuaries and analyzing the specific types of changes and similarities that occur, I hope to be able to see the larger patterns at work. I want to isolate the specific nature of outside influences that seem to be accepted and worked into designs. These can be quite different and quite telling. The Egyptian forms at a site that Egyptians controlled might be understood from a political perspective, while Egyptian forms that are borrowed and reworked at a site without Egyptian presence must be understood differently. The points of convergence among sanctuaries that belong to the same cultural group may make sense as a shared ritual basis to the religion of that group, but when such convergence is found in the sanctuaries of different cultural groups then there must be other forces at work. I am concerned with the settings in which sanctuaries functioned. Some were in dense urban environment in which their physical placement and allotted space become indicators of their importance or non-importance within the urban sphere. Some were quite isolated structures and yet had the power to draw to the quite valuable items which they could obviously protect, since we find them in the ruins. This would suggest a powerful force accorded hallowed ground over many centuries.

In addition to reading and writing, we traveled. Early on, Helen and I went to Syria, to the great museum collections of Damascus and Aleppo and to the sites of Ain Dara, Ugarit, and Amrit. This was followed by a trip to Israel to see several of the important sites. In Jordan we went out to Deir Alla and Lahun. We have, of course, not limited ourselves just to Late Bronze Age and Early Iron Age sites. This was our first trip to the Middle East, a region too rich in places of historical importance and natural beauty to be skipped over. Our travels have included Palmyra, Petra, Jerash, Caesarea, not to men-

tion Arab and Crusader castles, Byzantine churches, and the nature preserves at Ein Gedi, Wadi Mujib, and Wadi Dana.

Within the first week of our stay here, Helen and I began to master the bus system of Amman and soon were taking regular afternoon outings to various galleries in the city. We also attended concerts at the nearby Royal Cultural Center. In Vermont where I teach at the University of Vermont and chair the Art Department, the Middle East is little studied. We have just initiated a Middle East studies minor, and I was among those in the faculty involved in its creation. A part of my reason for coming to Jordan was to increase my first hand knowledge of this part of the world and to see how I could work to incorporate more about the Middle East into my own courses. Obviously my research will add some things, but it is highly specialized research, far outside the scope of any course I might teach. However, other aspects of my travels, reading, and explorations of Amman and Jordan will find their way into the University of Vermont curriculum. My courses on medieval art will be much enriched with a whole new exploration of Crusader and Arab castles, similarly my lectures on early Islamic art will now include my on-site knowledge of the mosque at Damascus and the palace of Hisam and the painted bath at Qasr Amra. I will be urging our geology and environmental studies faculty to consider



Helen and Bill Mierse at his desk in the library

seriously the issue of desert systems and the special micro-environments of places like the Wadi Dana, and I will push my own department and the Fleming Museum at the university to consider trying to doing something to highlight contemporary Arab and, particularly Jordanian, artists. I have long been committed to the need for Arabic to be included as a basic language at the university level and I return more committed than ever.

As a member of the Middle East Studies faculty, I will be promoting the need to increase the number of courses taught and will be working to see if we cannot broaden our offerings to bring in more contemporary literature.

Being here at ACOR has allowed me to pursue my own research and it has served as a venue from which Helen and I have been able to explore the region. Much of what we have seen and done will influence what I will do when I return to teaching next fall.

William Mierse

Jordan Then and Now:

An ACOR Fellow Remembers

Forty-five years ago, as a new college graduate, I volunteered to work overseas with the Mennonite Central Committee, a relief agency that still has offices in Jordan. When the letter arrived telling me I was assigned to Jericho on the West Bank, then governed by Jordan, I was totally puzzled. I had heard of Jericho, but I knew nothing of the Middle East. When I asked others, I did not get much help. Either they thought I would be living in a primitive land of sand, camels and nomads, or that I would be in constant danger from warring factions. But being young and naive, I looked forward to at least a very unique experience, even if it could be full of hardship and danger.

Well, it was a very unique experience indeed, but not what I had expected. Instead of hardship, I found a land with history at every turn, a culture endlessly fascinating and certainly the friendliest and most hospitable people I had ever met. It was quite an education for a young farm boy, and it left an indelible impression.

I never forgot Jordan and always yearned to return, but I never expected to have the chance because of responsibilities and finances. Then I learned of fellowships offered by the American Center of Oriental Research (ACOR) in Amman. I applied and was awarded a three-month fellowship.

So on Sept. 1, 1955, I found myself on a plane from Cairo to Amman. While I was much more knowledgeable than I had been 40 years before, I still did not know what exactly to expect. The

Amman I remembered from 1953 was a small city, a rather provincial capital. I knew, of course, that it had changed, but I was quite unprepared for the new Amman.

My first surprise was the beautiful Queen Alia International Airport, where I was smoothly guided through customs. This was indeed a change from 1953. As I stepped outside the airport, I was refreshed by the pleasant temperature after the intense heat of Cairo. The

taxi ride from the airport to ACOR was my first introduction to modern Jordan. The two-lane asphalt roads I remembered were now four-lane, lighted boulevards crowded with traffic. The only things that looked familiar were the hilly terrain and the stone buildings.

As we entered the city, I was even more amazed by the modern buildings, tree-lined boulevards, attractive shops and smooth-flowing traffic. What impressed me most, however, was the cleanliness: streets and sidewalks were virtually litter free, a condition I found repeated at the beautiful and immaculate campus of the University of Jordan. (Few U.S. cities and universities could boast this kind of order.) The only landmark I recognized in the new Amman was the Roman theater, but it was much restored.

I also remembered staying at the old Philadelphia Hotel which was now housed in a beautiful new facility. Later, the management there graciously invited me to look at photographs of the old hotel, as I remembered it from 1953.

Over the next few months I continued to be impressed by the "new" Jordan. While the city seemed to function smoothly, it also seemed alive and full of optimism. Everywhere there were new buildings under construction, new shops opening, new roads being built. This spirit was not only evident in Amman, however. Traveling throughout much of Jordan, I could see progress in a country with limited natural resources.

As an educator, I was particularly interested in Jordan's educational system. I soon discovered that its educated populace was the Kingdom's main resource. The literacy rate is very high, even among the poor. I visited a number of schools and gave a lecture at two—Princess Alia Community College and the University of Jordan. Since I speak only a few phrases of Arabic, the lectures were in English. I found that the students understood me perfectly and asked many intelligent questions afterward. (American college students who are rarely bilingual should take note.)

Educationally then, things had also certainly changed from 40 years before when I had taught a group of boys from the refugee camps outside of Jericho, on the West Bank.

The one thing, though, that had not changed in the 40 years since I left Jordan was the friendliness of the people. They were still as warm and hospitable as I had remembered. All the guidebooks I read before leaving the States remarked on this friendliness. The famous Arab hospitality to strangers is no myth. From taxi drivers to shopkeepers, from professors to government officials, I was always treated with courtesy and respect.

Before I left for Jordan I contacted a journalist who writes for the *Wall Street Journal*. She has written and traveled extensively in the Middle East. She said that I should have little difficulty working in Jordan because of its educated population, the openness of its institutions and government and the friendliness of its people. She was right on all counts.

I recall attending the coronation of His Majesty King Hussein in 1953 (I do not recall how I got invited). He was a very young man then, working against tremendous odds. Today he is highly respected throughout the world as a man of integrity and a voice of reason. He continues to lead his country into modernity without sacrificing its unique traditions. Under his leadership, the people of Jordan seem to take pride in their country, and they should. While there is much to do, much has been accomplished. Because of their spirit, I have great faith in the people of Jordan. And I would like to say "thank you for my memories of your country." I will fly your flag proudly, wear my Jordanian emblem on my shirt, and say "inshallah, I shall return some day to a land and people I love."

Ronald Kirkwood, NMERTA Senior Educator Fellow at ACOR, 1995 (Reprinted from the Jordan Times)

Field Reports

Test Excavations at Ghwair I, a Neolithic Settlement in the Wadi Feinan

The remote Wadi Feinan has, for many years, been known to be a rich archaeological region. This spectacularly chiseled landscape was an important copper-producing region from at least the Chalcolithic period. Major settlements dating to the Neolithic period also have been recorded in the region, and during October-November, 1996, the Department of Anthropology at the University of Nevada, Las Vegas and the Department of Antiquities of Jordan conducted a joint test-excavation at the pre-pottery Neolithic site of Ghwair I, a small Neolithic settlement (approximately 1.5 acres) located at the junction of Wadi Ghwair and Wadi Feinan.

It had previously been investigated in 1993 by Dr. Najjar, who documented the presence of exceptionally well-preserved architecture. The objective of the brief 1996 season was to further assess the site's significance and suitability for major interdisciplinary investigation. Ultimately, we hope to compare small "rural" settlements such as Ghwair I to much larger more "urban" communities such as 'Ain Ghazal, Wadi Shu'eib, or Basta to see if similar patterns of adaptation and possible ecological degradation can be documented.

We excavated at four separate areas of Ghwair I. In addition, we also mapped the site using a total distance station. The four areas studied are described below. As material recovered is still under analyses, the following must be considered as but a preliminary indicator of our results.

Upper Terrace. The 1993 excavations had concentrated on rooms exposed by wadi erosion. We opened up a new unit in an area that we hoped would contain a major structure and this endeavor proved successful, as a large room has now been partially excavated. This room is more substantial than other rooms at the site, and contains some features suggestive of cult usage.

These include a series of three well-constructed niches in the southern wall and a floor-level opening that may have functioned as a drain. Approximately one half of this room was excavated to the first floor.

In addition to the new unit, we also further exposed a room first open up in 1993. This was a small "D" shaped structure with a niche reminiscent of an "altar." Our studies here further documented a burnt area immediately in front of the niche, as well as a cobble-lined pit opposite it.

The presence of two possibly ritually oriented rooms in such proximity suggests that cultic activities may have been quite common at Ghwair I. This in turn suggests that a certain degree of social stratification may have been present at this small settlement.

Southern Edge of the Site. We excavated two units here in hopes of documenting the southern boundary of the settlement. A series of roughly parallel walls was exposed, each deeper than the other. The function of these is unclear at this point, but they are quite thick (ca. 1 m), and may have formed successive retaining walls to protect the settlement from erosion and/or rain waters.

The Eastern Ash Pit. In 1993, an ashy lens was exposed at the eastern boundary of the site. We excavated a roughly 2 x 2 m area here and the results from this small exposure are intriguing. The ash deposit is roughly 1 m thick, and near its bottom is a series of small pits. These may represent the basal level of the site, perhaps reflective of the original settlement's foundation. One PPNA-type projectile point (similar to an El-Khiam point) was recovered. This, along with the large number of bladelets at the site, could indicate a substantial antiquity to the settlement, but this remains to be verified.

Although of limited duration, the 1996 season also focused on systematic techno-typological lithic analysis. While the nature of this analysis was preliminary, the assemblage is interesting in several ways. First, the relatively large number of bladelets (as well as the previously mentioned PPNA-type point), suggests an early occupation. If Ghwair I was initially settled during the PPNA, it would represent one of the few such sites known in Jordan. Of interest is the PPNA site of Dhra, some 75 km to the north. Also of interest in the chipped stone assemblage is the abundance of projectile points as the main tool type. This appears rather specialized given that the site is a substantial settlement. Overall, the assemblage fits in quite well with a relatively early PPNA affiliation, but the possible addition of an earlier component is intriguing.

Paleoeconomy is a major focus of our interest in the site. Paleobotanical samples are presently under analysis by Dr. Reinder Neef. Fauna is abundant and well-

preserved. Preliminary analysis, undertaken by Dr. Paul Croft, indicates the presence of caprine, cattle, small carnivores, pig, and one or more species of bird.

Finally, numerous carbon samples were taken. Three dates already exist for the site, and suggest an early eighth millennium placement for the lower levels of the upper terrace. The new samples will help to clarify the chronology of Ghwair I, place it within a regional context, and verify if, indeed, a PPNA component is present.

In summary, our brief investigation at Ghwair I has further documented the settlement's significance and demonstrated that it contains the type of data necessary to address a wide range of research questions. We hope to continue studies at the site in the near future.

Alan H. Simmons, University of Nevada at Las Vegas and Mohammad al-Najjar, Department of Antiquities

Madaba Plains Project

Tall Hisban Survey and Restoration. Adding to our earlier surveys of the Hisban region, the Madaba Plains Project carried out a random-square survey within a 5-



Tall Hisban

km radius of the tell. Fifty of 100 randomly selected 200 x 200-m squares were examined, resulting in the discovery of 20 new sites. Iron II and Byzantine remains predominated, many other sites and periods being poorly represented in the plains region due to intensive land use.

In addition, nearly two decades after excavations there, the initial phase of restoration at Tall Hisban was undertaken. Along with a small probe at the location of a Hellenistic tower, workers cleared away accumulated rubble and installed signs, pathways, steps, a parking area, and interpretive platforms.

Environmental Survey. The most important discovery in 1996 of the environmental team was the location of a Paleolithic (and later Stone Age) site at Azraq. In the quest for pollen core samples, the team recovered 500

pieces of worked stone and faunal material from one of the newly exposed, dry lake bottoms. Stone implements at what appears to have been a butchering site included bifaces, unifacial flake tools, blades, points, and debitage.

Subsurface Mapping at Tall al-'Umayri and Tall Jalul.

The subsurface mapping team carried out investigations using Ground Penetrating Radar (GPR) at 'Umayri and Seismic Refraction (SR) at Jalul. With a 400-MHz transceiver at 'Umayri, the team completed a GPR survey of the southern and northern perimeters of the tell to clarify, if possible, the Iron I wall system and to determine if the "casemate" or "protocasemate" wall on the western escarpment could be traced further around the town. A 40 x 55 m topographical depression between 2 and 3 m below the surrounding terrain on the eastern portion of Jalul was the subject of SR research. The depression may indicate the presence of a large water system. Analysis of results from both subsurface mapping techniques is in process.

Bronze Age: Tall al-'Umayri. The earliest settlement at 'Umayri dates to the Early Bronze Age I, around 3000 B.C., when a dolmen was constructed at the southeastern base of the site. While over 20 burials were found in earlier work, this season's excavations focused on the area immediately outside the dolmen itself. Seven floors, one on top of the other, appeared just west of the dolmen and also date to EBI. This indicates that the people living at the site celebrated funerary rites at the dolmen long after the burials had begun.

Iron Age: Tall al-'Umayri and Tall Jalul. Two Iron Age settlements at 'Umayri continue to receive attention: a well-fortified early Iron I town and a late Iron II/Persian Ammonite administrative center. The former represents one of the best-preserved sites from the early Iron Age (ca. 1200 B.C.) found anywhere in the region. More of the western defensive wall and adjacent housing was excavated in 1996, showing an extent of wall 30 m long. At its southern end, the wall curves into the site, suggesting a possible gate. Final exposure of a "pillared building," resembling the floor plan of a "four-room house" from the hill country of western Palestine, probably reflects architectural ties with that region. At 'Umayri, however, the broad room of the building was part of the "casemate" or "protocasemate" western wall. Cultural finds indicate a simple people with a limited repertoire of pottery and objects, reflecting the settlement of local tribal groups. Eighteen large jars containing grape and olive seeds were found in a later storeroom dating to the 11th century.

A large complex of buildings from the time of the late Ammonite kingdom, about 550 B.C., administered scores of nearby rural sites which were dedicated to wine production in the hills around the tell. This season, the largest room of the administrative center was uncovered, complete with three levels of plastered floors. Architectural and cultural remains argued against a private, domestic function for the building.

Excavations at Tall Jalul have exposed architectural

and cultural remains from early Iron II, Iron II, and Iron II/Persian periods. From the early Iron II period (tenth to ninth centuries), on the eastern part of the tell and atop 1 m of Iron I destruction debris, excavations uncovered a flagstone approach-ramp and the foundations of an outer gate-house, as well as what appears to be the threshold of an inner gate-house. It appears that part of the gateway was rebuilt a century or so later (ninth to eighth centuries), the original, small outer gate-house having been replaced by a larger one slightly to the south. The entire gateway system was again reconstructed sometime during the middle of the late Iron II period (eighth to seventh centuries), the approach ramp following the same line as the original early Iron II ramp.

Also from this time, a tripartite building on the northern side of the tell was discovered. Although badly damaged from later Persian-period activity, parts of all the walls could be traced. Two parallel rows of stone pillars which supported the roof separated the building into three long rooms, the two side rooms having been paved with flagstones. Along with animal and human figurines, two engraved seals in Ammonite script were found here, suggesting that the border of the Ammonites during the latter part of the Iron Age extended as far south as Madaba.

The late Iron II/Persian period at Jalul was represented by a large Persian building near the center of the tell which was supported by at least two rows of stone pillars. Artifacts found in the ruins included two incense altars, a stone roof-roller, and basalt and iron implements.

Douglas R. Clark, Walla Walla College; Lawrence T. Geraty, La Sierra University; Larry G. Herr, Canadian Union College; Øystein S. LaBianca and Randall W. Younker, Andrews University

Sa'ad

The University of Arkansas and Yarmouk University continued joint excavations at two necropolises at the site of Sa'ad in the Mafraq District during the summer of 1996. In addition to staff from both institutions, five American and seven Jordanian bioarchaeology field school students participated.

Two large chamber tombs with trench graves cut into the bed rock were located during the 1995 excavations in the flat courtyard area to the west of the Byzantine church (Necropolis I). In 1996, ten trenches were cleared to bed rock in an attempt to locate additional tombs. These exploratory trenches located to the south of the church encountered the corner of a dwelling with plaster floors and stone walls. The ceramics and construction modifications suggest the dwelling was initially constructed during the Late Roman/Early Byzantine period and was subsequently modified and occupied during Islamic times. Although previous excavations had located a church, mosque, three wine presses, and industrial buildings, this is the first house encountered.

Farther to the south, a large chamber tomb constructed into the bedrock was located and cleared. Originally constructed as a tomb, it was subsequently cleared and modified for human occupation which occurred intermittently until modern times. During the first modification, a plaster floor was laid down which covered, sealed and protected six slit-trench graves located parallel to each other in the entrance area of the tomb chamber. Each slit grave was cut into bed rock and covered by transversely placed cut rock slabs, one of which is an inverted sarcophagus lid. Each grave contained multiple individuals whose well-preserved, but fragmented, skeletons were commingled. This suggests that the dead were placed into the grave and then the bones of the



Typical tomb with sarcophagus in place (photo by Ibrahim Sadaka)

decomposed body were spread about prior to the interment of the next individual. It is also possible that they represent an ossuary where decomposition of the body occurred elsewhere. Preliminary analysis in the field suggests the following minimum number of individuals in each grave: Grave 1, 10; Grave 2, 3; Grave 4, 4; Grave 5, 5; Grave 6, 3. Construction of a sixth grave (Grave 3) was never completed.

Necropolis II is located in a small wadi approximately 400 m northeast of the Byzantine church. Here horizontal rows of tombs were cut into the bedrock of the hillside. The 1995 excavations cleared 17 robbed and 13 partially intact to intact tombs. The 1996 excavations began by excavating east-west trenches up slope from

the known tombs. A total of 22 tombs were discovered, cleared and mapped in 1996. Of these, 68% had been robbed in recent times.

These tombs were constructed by digging an entrance way averaging 181 cm in length and 77 cm in width down into the bedrock. Once a clean vertical face was achieved a horizontal tomb was cut into the rock; the tombs averaged 214 cm in length, 77 cm in width, and 112 cm in height. Once the body was placed inside the tomb the doorway was sealed by courses of undressed rock. The ideal or preferred location for the tomb rows was where a hard layer of sandstone was underlain by softer rock. The tomb was located such that the harder layer would form the roof of the tomb. Where this locational preference was followed the tombs are intact, but where a hard layer did not form the roof, the tomb has collapsed.

The 22 excavated tombs were arranged in three horizontal rows. Roughly cut stone sarcophagi were found in 19% of the tombs. The size of the sarcophagi indicated that all were for subadults and one for a new born infant. Two of the tombs were not of standard construction. Tomb 42 was cut vertically into the rock (no ceiling) and a sarcophagus was placed in the bottom. Tomb 47 was also cut vertically down into the rock. A trench was then cut into the bottom leaving a ledge of rock around the trench. The skeleton, without grave goods, was placed into the trench which was then covered by transversely placed rough cut rock slabs. In all respects this tomb resembled the slit graves found in Necropolis I.

Grave goods of some note were found in 32% of the graves while 9% had what might be considered a complete complement of personal items. An alabaster trivet was found in Tomb 33. The usual complement of personal items consist of gold foil earrings (presumably only for the females), beads, bronze and iron bracelets and finger rings of bronze and iron. Tomb 39 had the largest variety of grave goods: bone finger ring, bronze finger ring, an iron finger ring in 3 fragments, large milky-white stone bead carved on the bottom, fragmented carved bone medallion, 17 beads, 2 iron bracelets, 1 bronze bracelet, 4 long bronze fragments, a bronze hairpin, 2 gold foil earrings with inlaid small red stones, light green stone bead in a grape cluster shape, light green stone bead with animal head shape, blue stone bead which is jug shaped and has T-shaped engraving on both sides, numerous bead fragments, disk shaped metal bead, and one long bronze fragment.

Preliminary skeletal analysis indicates that there are 10 adults, 5 subadults, and 8 of unknown age grouping. Three of the adults are female. All of the adults are of small size and robusticity suggesting a rather poor childhood diet. This is in contrast to the remains from Necropolis I which are all large and robust suggesting a much richer childhood diet.

Jerome C. Rose, University of Arkansas, and Mahmoud El-Najjar, Institute of Archaeology and Anthropology, Yarmouk University

Director's Report: July-December 1996

Pierre M. Bikai

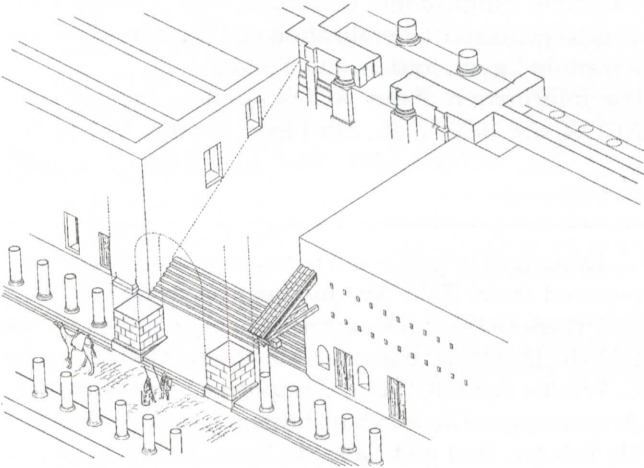
ACOR Projects

ACOR/USAID and the Ministry of Tourism and Antiquities:

Amman Citadel, Ayyubid Tower Restoration, Antoni Ostrasz, architect

Madaba: Archaeological Park and Mosaics Shelters, Church of the Prophet Elias, Ammar Khammash, architect; Burnt Palace, Presentation Phase, Leen Fakhoury, architect

Petra: Petra Church Shelter and Conservation Project, Zbigniew T. Fiema, archaeologist; Robert Shutler, architect; and StarNet, contractor; Roman Street and Shops Feasibility Study, Chrysanthos Kanellopoulos, architect; Zbigniew T. Fiema, archaeologist



Chrysanthos Kanellopoulos's preliminary restoration drawing of part of the Roman street at Petra

Petra Papyri Publication Project

University of Michigan: Ludwig Koenen, Robert W. Daniel, Robert Caldwell, and Traianos Gagos; University of Helsinki: Marjo Lehtinen; ACOR: Zbigniew T. Fiema and Fatma Marii

ACOR-Assisted Field Projects

'Ain Ghazal, Zeidan Kafafi and Gary Rollefson
Ghwair in the Wadi Feinan, Alan H. Simmons and
Mohammad al-Najjar

Humeima, John Oleson

Lehun, Denyse Homès-Fredericq

Madaba Plains Borderlands Survey, Chang-ho C. Ji

Madaba Plains Project, Larry Geraty *et al.*

Petra, Great Temple, Martha Joukowsky

Petra, Ridge Church, Patricia Bikai

Tell Abu en-Ni'aj, Steve Falconer

Tell Madaba, Timothy Harrison

Wadi Ramm Recovery Project, Dennine Dudley and
Barbara Reeves

Wadi eth-Themed, Michèle Daviau

Umm el-Jimal, Bert de Vries

Lectures

July 7. S. Thomas Parker: Eila, a Roman Port on the Red Sea

July 14. Michèle Daviau and Andy Dearman: Moabites and Nabataeans at Wadi eth-Themed

July 28. John Oleson: Roman Humeima

July 30. Larry Geraty and staff: Madaba Plains Survey

August 4. Bert de Vries: 1996 at Umm el-Jimal

August 11. Gary Rollefson and Zeidan Kafafi: The 1996 Season at 'Ain Ghazal

August 14. Martha Joukowsky and staff: The 1996 Season at the Southern Temple in Petra

August 18. Robert W. Daniel: Jig-Saw Puzzles—The Petra Scrolls

Fellows in Residence

Near and Middle East Research and Training Act (NMERTA)

NMERTA POST-DOCTORAL FELLOWS:

Julie Hansen, *The Archaeology of Plants: Palaeoethnobotany of the Mediterranean Basin*

Beshara Doumani, *Family and Society in Greater Syria: A History of the Merchant Families in Jerusalem and Nablus, 1750-1914*

Robert W. Daniel, *Editing of the Carbonized Papyrus Archive from Petra*

ACOR Remembers

Antoni Ostrasz

On Oct. 10, we learned of the death of Antoni Ostrasz at the age of 68. His work over many years at Jerash was a major contribution to the archaeology of Jordan. In 1996, he was director of the ACOR project to restore the Ayyubid Tower on the Citadel. During that time, he lived at ACOR and we all came to appreciate his careful scholarship, his elegant manners, and his enjoyment of what he was doing. He will be missed.

Eleanor Emlen Myers

We were saddened to learn of the passing of Ellie Myers on Dec. 12. She and her husband Wil had worked with ACOR and with other groups on aerial photographs of many sites in Jordan. The aerial photograph of the Petra Church has become a favorite.

Ellie's enthusiasm, both for the photographs and for the people she was involved with, was infectious. She will be missed.

Phillip C. Posey, *Music and Art in Contemporary Middle Eastern Culture*
 William Mierse, *Comparative Study of the Late Bronze and Early Iron Age Sanctuary Designs in the Levantine Region of the Eastern Mediterranean*
 Robin McGrew-Zoubi, *Middle Eastern Women in Science: A Study of Science Education in Gender Separate Schools in Jordan*
 NMERTA PRE-DOCTORAL FELLOWS:
 Jeffrey A. VanDenBerg, *Research on the Foreign Policy-Making Process in Jordan*
 David M. Priess, *Jordanian Alignment Decisions, 1971-91: The Role of Threat Perception in Foreign Policy*
 Zoharah Simmons, *Women's Status in the Middle East and Legal Reforms: The Connection*
 Quintan Wiktorowicz, *The Role of Islamic Private Voluntary Associations in Democratization in Jordan*
United States Information Agency Fellows:
 Charles Wilkins, *The Muslim Community of Jaffa, 1839-1856: History of a Muslim Community in Social and Political Transformation*
 Scott Greenwood, *State, Business and Democratization in Egypt and Jordan*
 Sandra A. Scham, *Pastoralism and the Emergence of Sociopolitical Complexity in the Chalcolithic Period—Teileilat Ghassul*
 Timothy Gianotti, *The Secrets of the Soul, Death, and the*

Afterlife in the Thought of al-Ghazali (d. 1111)
 Marjorie Kelley, *A Comparative Study of Tourism in Hawaii and Jordan*
 Sherry Lowrance, *The Jordanian Women's Movement and Democratization*
 G. Wesley Burnett, *A Photographic Site Situation Study of Jordanian Protected Areas*
 Ingrid Schneider, *An Administrative Study of Jordanian Protected Areas*
 Caroline Davies, *The Biogeography of Levantine Palaeoclimatic Transition Zones*
 Sarah Harvey, *The Impact of Environment and History on the Settlement Pattern of the Nabataeans in South-western Jordan and Negev*
 Bryan Daves, *Coalitions and Economic Adjustment: Jordan and Morocco*
Arabic Speaking Academic Immersion Program (ASAIP):
 Chris Stone, Najib Hourani, and Ghada Qaisi
ACOR-affiliated Council of American Overseas Research Centers (CAORC) Fellow:
 Valentine Moghadam, *Toward a New Gender Contract? Economic Liberalization and Women's Employment in Egypt, Jordan, and Turkey*
 For information about ACOR's fellowships contact: ACOR, 656 Beacon St., 5th Floor, Boston, MA 02215-2010, Tel.: 617-353-6571, Fax: 617-353-6575, e-mail: acor@bu.edu.

Donors to ACOR

From July through December, 1996, the following friends of ACOR donated to the endowment: American Women of Amman, Bob and Mette Beecroft, Almut Busse, Helen Cecil, Terry Christensen, Bert and Sally de Vries, Wesley and Virginia Egan, Harold O. Forshey, Henry George, Lawrence T. Geraty, Seymour Gitin, Beth Grindell, Julie Hansen, Donald O. Henry, Steve and Cindy Infantino, International Telephone Company, Joukowsky Family Foundation, Widad Kawar, Norma Kershaw, Eve Kirk, Nancy Lapp, Martin Meyerson, Doris Miller, Michel Mouawad, Anne Ogilvy, Randolph Old, Gaetano Palumbo, S. Thomas Parker, St. Olaf's College (Edward Langerak), Donald Saunders Family Fund, Joe Seger, the Selz Foundation (Bernard Selz), Khalid and Suha Shoman, Society for Asian Art (June Arney), Leila Sharaf, H.R.H. Prince Ra'ad bin Zeid, and Judy Zimmerman.

Donations to the Jennifer C. Groot Endowment were made by Bruce Gould, S. Thomas Parker, Timothy C. Ferrell; to the Harrell Family Fund by Edgar and Paula Harrell, Erik and Renathe Harrell, Matt Harrell, Phil Harrell, and Norman Schiff; and to the Kenneth W. Russell Trust by Carolyn Draper, Gaetano Palumbo, Ingrid Schneider, and Joe Seger.

Donations in kind in support of ACOR operations were received from Michèle Daviau, Dan and Nancy Gamber, Michele Londino, and Amin Kawar and Sons (Elias Attalah).

Donations of books and journals for the library were received from: Zaki Ayoubi, Leigh-Ann Bedal, Pierre and Patricia Bikai, Department of Antiquities (Ghazi Bisheh), Jose Maria Blazquez-Martinez, Oded Borowski, G. Wesley Burnett, David Campbell, Cyprus American Archaeological Research Institute, Thomas A. Dailey, F. De Bel-Air, Bert and Sally de Vries, Roald F. Docter, Elzbieta Dubis, Edith Dunn, Steven Falconer, Dan and Nancy Gamber, Seymour Gitin, Maurice Grolier, Donald O. Henry, Larry Herr, Wada Hisahiko, Denyse Homès-Fredericq, Artemis A. W. Joukowsky, Martha Joukowsky, Lina Kattan, Marjorie Kelly, Øystein LaBianca, Thomas Levy, Sherry Lowrance, Burton MacDonald, Jodi Magness, Fatma Marii, Patrick McGovern, Mark Meister (Archaeological Institute of America), New York University Library (Meryle Gaston), John Oleson, Julio S. Navarro Palazon, Glen Peterman, Brigitte Porée, Phillip Posey, Marie-Jeanne Roche, Gary Rollefson, Avraham Ronen, Jerome Rose, Bruce and Carolyn Routledge, Ingrid Schneider, James Sims, Yasser Tabbaa, University of Pennsylvania Museum, Hisahiko Wada, Tomasz Waliszewski, and Peter Warnock. A cash donation for the library was received from Lydie Shufro, and a donation to the library endowment from Eve Kirk.

Omitted in error from the last issue of the *ACOR Newsletter* were donations for the endowment from Lyman Bloomingdale, L. Carl Brown, Gladys Callahan-Vocci, Harold Forshey, Virginia Nichols, and Walter Rast; and to the library from Roger Boraas and the University of Jordan.

ACOR Endowment Campaign

By contributing to the American Center of Oriental Research endowment drive, you will not only help insure ACOR's future but also generate additional money from a Challenge Grant from the National Endowment for the Humanities (NEH).

During its first two decades, ACOR made enormous strides. Starting from scratch, ACOR became a major research center with a large purpose-built building, an extensive research library and a variety of equipment for supporting archaeology in Jordan. However, during those decades no provision was made for lean years. ACOR lived hand to mouth, with the expenses of each year met by income in that year.

The early 1990s demonstrated clearly the dangers of not having adequate reserves. During the Gulf Crisis there were no fellows, few archaeologists, no development projects—no cash to maintain the building or pay the staff.

In 1994, the Board of Trustees decided to insure the future by creating an endowment fund that would be adequate to support skeleton operations during lean times. The objective is a fund of \$3.1 million.

To assist in meeting this target, ACOR applied for and was awarded a Challenge Grant from the National Endowment for the Humanities. NEH will match up to \$133,333 on a 1 to 3 basis between December 1, 1994, and July 30, 1999. For example, if you donate \$3,000, NEH will add \$1,000 for a total of \$4,000.

Please help us protect ACOR's future, and take advantage of the NEH challenge. Mark checks for less than \$1,000 "ACOR endowment—NEH challenge" on the memo line. For donations of \$1,000 or more, and all non-cash donations (e.g., shares of stock), we require a separate letter with the wording:



NATIONAL ENDOWMENT FOR THE HUMANITIES

WASHINGTON, D.C. 20306

THE CHAIRMAN

December 30, 1996

Pierre Michel Bikai
American Center of Oriental Research
656 Beacon St., Fifth Floor
Boston, MA 02215-2010

Dear Dr. Bikai:

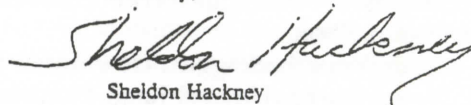
On behalf of the National Endowment for the Humanities, I would like to congratulate you on your NEH challenge grant. The Endowment is very pleased to join with you in strengthening humanities activities at the American Center of Oriental Research. This is a high honor: yours is one of only two international organizations to receive an NEH Challenge Grant in FY 1997.

As you know, NEH challenge grants are offered only after a demanding peer review process. Your proposal was reviewed by outstanding scholars and administrators of research organizations with experience in long-term planning for the humanities. These evaluators noted that ACOR has had "immense value" for "everyone working in the field of Jordanian antiquities" as well as for students of Arabic, especially since the end of the Gulf War.

The evaluators praised the commitment of the Center's very impressive Board of Trustees; the careful long-range planning; and the excellence of the research already supported. An endowment to stabilize salaries will have a significant impact on the work of the Center and allow it to have an even greater international impact on humanities research.

Again, congratulations on this NEH challenge grant. We are delighted to be a funding partner for this exciting endeavor, and I hope others will join with us in supporting this opportunity for the enrichment of the humanities.

Sincerely,


Sheldon Hackney
Chairman

In support of ACOR's National Endowment for the Humanities Challenge Grant #CH20335 for the period December 1, 1994 to July 31, 1999, I verify that I gave the sum of [or item - describe - valued at] _____ to be used to match and to be expended for the approved purpose of this grant, i.e., the ACOR endowment. I made payment of this gift directly to the American Center of Oriental Research on [date]. Donations may be sent to ACOR, 656 Beacon St., 5th floor, Boston, MA 02215-2010 or ACOR, PO Box 2470, Amman 11181 Jordan.

ACOR is tax exempt as a 501(c)(3) organization, as determined by the U.S. Internal Revenue Service. Thus, your donation may be eligible for a charitable deduction for U. S. federal, state and municipal income tax purposes, depending on your tax situation.

News and Notes

July 2. 106 pieces of mail come in for the various projects out in the field.

July 3. Tom and Francesca Bennett come by to visit the scroll they adopted.

July 3. The heat is so bad that the Wadi eth-Themed group knocks off an hour early.

July 4. Tom Parker's Aqaba group comes in from the heat—their season is over.

July 4. Canadian Ambassador Michel de Salaberry comes by to join in the slightly-delayed Canada Day celebration (Canada Day is July 1)—hamburgers, country music and lots of Canadian flags. Some did note that it was also the 4th of July!

July 7. ACOR hosts a farewell for USAID Director Tom Oliver who is being posted to Washington, D.C.

July 10. The scroll team recall Bob Caldwell's effort to restore a completely new version of Homer's *Odyssey* from one word he found on a piece of the scrolls!

July 15. The concert at Darat al-Funun, a benefit for the Kenneth W. Russell Trust, goes off beautifully. The evening is balmy, the house full, and the music lovely. Following the concert, H.R.H. Prince Ra'ad and Princess Majda give a dinner for the Joukowskys and the ACOR Board of Trustees.

July 24. ACOR usually gives a small party for Michèle Daviau's group when their season ends—since they have been resident in ACOR for two months. This year's party is all organized when I decide to invite all the ACOR-assisted expeditions in the country. The guest list suddenly swells to over 250 for a party three days hence. Everyone panics!

July 25. John Oleson's bedraggled crew from Humeima comes in from the heat.

July 26. Bert de Vries' bedraggled crew comes in from the heat. The garage has Umm el-Jimal, Humeima, and Wadi eth-Themed vying for an inch of space.



View of the balcony during the July party



Tomasz Waliszewski

July 27. The party is a great success, bringing together the dig teams from Wadi eth-Themed, Humeima, Umm el-Jimal, Tell Madaba, 'Ain Ghazal, Madaba Plains, and Moab.

July 28. Ambassadors Ali Sarwar Naqvi of Pakistan, William Habib of Lebanon, and Mary Wickes of Australia come by for a tour and lunch.

July 30. Word comes that ACOR's application to NEH for fellowships has been partially funded.

Aug. 8. Traianos Gagos claims to have found the name of another church in the scrolls. Bob Daniel, who has made the official "corroborator", the equivalent of a Byzantine honorific, happily corroborates Traianos's information.

Aug. 9. Hershel Shanks (of *Biblical Archaeology Review*) comes by for lunch and a tour.

Aug. 15. Fellow Marjorie Kelly departs. Unfortunately, she has paid her bill. Kathy had hoped that she wouldn't—necessitating a trip by Kathy to Marjorie's home in Hawaii to collect!

Aug. 25. Tomasz Waliszewski arrives to work on the documentation of the floor and wall mosaics of the Petra Church.

Aug. 29. I lead a group of 80 from the Friends of Archaeology on a tour of Petra.

Sept. 6. All but one of the few residents remaining go off for a tour of Um al-Rasas. It's VERY quiet.



The concert at Darat al-Funun, sponsored by ACOR and the National Music Conservatory/Noor al-Hussein Foundation. It was organized by ACOR fellow Philip Posey who is at center.

Sept. 6. Abed and I spend the afternoon re-potting the house plants (yes, it's that quiet around ACOR!).

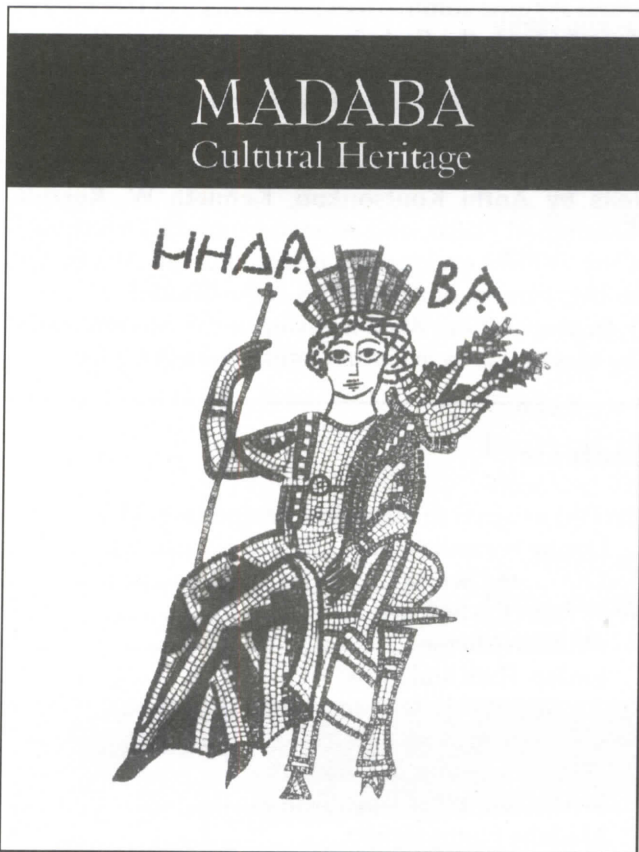
Sept. 9. Abed harvests the grapes from the vine planted last spring. There is enough for dessert after lunch—one grape apiece!

Sept. 10. In the evening, the last members of the Madaba Plains Borderlands Survey Project, part of the Madaba Plains Project, depart. The summer dig season, which began with the arrival of Tom Parker's Aqaba group on May 10, is over. It was fun!

Sept. 14. Shishir Dutta arrives to print *Madaba: Cultural Heritage*.

Sept. 15. Chrysanthos Kanellopoulos presents a concept for the restoration and sheltering of the baptistry of the Petra Church.

Sept. 19. Anthi Koutsoukou struggles with the final corrections for *The Great Temple of Amman: The Excavations*.



Sept. 22. Shishir brings the first bound copy of *Madaba: Cultural Heritage*. He's done a wonderful job with it.

Sept. 25. Remember the Roman Empire TV show that Zbig and I appeared in? The series won an Emmy!

Sept. 25. A review of the JADIS volume edited by Gaetano Palumbo appears in the Jordan Times. Rami Khouri writes: [the Department of Antiquities and ACOR] have combined yet again to produce work that is both impressive for its scholarly quality and important for its developmental and conservational relevance." Thank you, Rami.

Sept. 29. Annie Caubet, curator of antiquities for the

Louvre, comes by for lunch and to use the library. After several hours there, she calls it a 'jewel.'

Oct. 15. Peter Warnock arrives carrying 20 pounds of chocolate chips and brown sugar.

Oct. 29. The Jordan Committee of the ACOR Board of Trustees meets and afterwards there is a small reception so the board members can meet the current fellows.

Nov. 1. Fatma Marii returns from a conference on mosaics in Cyprus. Her new motto: "If you can't conserve it, don't dig it!"

Nov. 17. Ramzi Touchon and his party of tree ring counters pack up the tree slabs and depart for the U.S., leaving the debris of numerous trees with missing three-inch slabs—suitable for firewood, but ACOR doesn't have a fireplace!

Nov. 28. The annual ACOR Thanksgiving turkey dinner, prepared by Mohammed, Said, Abed, Vicki and Caesar, is delicious.

Nov. 29. Paul Scham plus 20 others arrive for a workshop on Jordanian-Israeli issues sponsored by the Truman Institute (Jerusalem).

Dec. 10. Robert Middlestaedt is appointed assistant director for Amman.

Dec. 13. Trustee Randy Old becomes an ACOR resident. Over the next five days, we put him to work on the accounting, audit, insurance, etc. [And he thinks it's fun!]

Dec. 17. The science editor and a photographer from *USA Today* tour ACOR.

Dec. 21. A group of fellows from ACOR visit Widad and Kamel Kawar's home and are treated to an exhibit of Widad's collection of regional costumes.

Dec. 23. Most of the residents depart for Christmas. It starts to get very quiet. After considerable discussion it is decided that Mohammed shouldn't cook Christmas dinner for the few who remain—the first time in ACOR history.



Mohammed Adawi with his youngest children

Dec. 25. The traditional holiday brunch for the employees and their families is held. H.R.H. Prince Ra'ad and Princess Majda join us.

Dec. 31. There is a VERY QUIET New Year's Eve party. It is so quiet that by midnight only Bill Mierse and I remain!

Trustees Meet in New Orleans

On Nov. 22, 1996, the ACOR Board of Trustees met in New Orleans. The major topics on the agenda were the National Endowment for the Humanities Challenge Grant, the endowment campaign in general, investment policy issues, and the needs of the library. In other actions, Dr. Patricia M. Bikai was appointed Associate Director.

During the meeting, Dr. Zbigniew T. Fiema's contribution to the success of the Petra Church Project was recognized.

In the evening there was a reception for the friends of ACOR.

On Nov. 23, there was another reception held by the American Schools of Oriental Research (ASOR). On that occasion, acting on behalf of H.M. King Hussein, H.R.H. Prince Ra'ad bin Zeid presented a medal, the Order of the Star, to former ACOR director, Dr. James A. Sauer.

ACOR Trustees

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Dr. Pierre M. Bikai, ACOR Director and Dr. Joe Seger, ASOR President

ACOR and its Newsletter

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ACOR Publications

The Mosaics of Jordan by Michele Piccirillo. Large format, cloth-bound volume includes 303 pages in full color with 824 illustrations, plans and aerial photographs. \$175.00 (includes shipping).

The Great Temple of Amman by Chrysanthos Kanellopoulos. The architecture of the temple that was excavated, studied and partially restored by ACOR. \$80.00 (includes shipping).

JADIS: The Jordan Antiquities Database and Information System: A Summary of the Data, edited by Gaetano Palumbo. Basic information on nearly 9,000 archaeological sites from all periods. This 453-page, hard-bound volume is xerographically reproduced. There are 117 maps of sites by region and period, plus one fold-out map. \$40.00 (includes shipping).

Madaba: Cultural Heritage. This 113-page paperback volume summarizes the heritage of the 'City of Mosaics' from the Early Bronze Age through the Late Ottoman period. Includes a separate map. An Arabic translation is available for free if requested. \$35.00 (includes shipping).

In press: *The Great Temple of Amman: The Excavations* by Anthi Koutsoukou, Kenneth W. Russell, Mohammad Najjar, and Ahmed Momani. Description of the 1990-93 excavations undertaken by ACOR and the Department of Antiquities at the Citadel.

In preparation: *Ancient Ammonites & Modern Arabs: The Madaba Plains in Central Jordan through the Ages*.

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